## Claims

- [c1] What is claimed is:
  - 1.A method for dynamically adjusting an operational frequency of a digital processing device comprising: selecting a frequency operational mode; setting a range of operational frequencies according to the frequency operational mode; and selecting an operational frequency within the frequency range for running the digital processing device.
- [c2] 2. The method of claim 1, wherein the frequency operational mode is used for assigning a variation tolerance of the operational frequency.
- [c3] 3. The method of claim 1 being performed in a video graphics adapter (VGA).
- [c4] 4. The method of claim 1 capable of being used for adjusting the operational frequency by changing a core clock, a memory clock or both of them.
- [05] 5. The method of claim 1 being performed in a central processing unit (CPU).
- [c6] 6. A method for dynamically adjusting an operational

- frequency of a digital processing device comprising:
- (a) setting a frequency range; and
- (b) selecting an operational frequency in the frequency range for running the digital processing device.
- [c7] 7. The method of claim 6, wherein step (a) further comprises:
  - (a1) selecting a frequency operational mode; and
  - (a2) setting a range of operational frequencies according to the frequency operational mode.
- [08] 8. The method of claim 7, wherein the frequency operational mode is used for assigning a variation tolerance of the operational frequency.
- [c9] 9. The method of claim 6 being performed in a video graphics adapter (VGA).
- [c10] 10. The method of claim 6capable of being used for adjusting the operational frequency by changing a core clock, a memory clock or both of them.
- [c11] 11. The method of claim 6 being performed in a central processing unit (CPU).
- [c12] 12. The method of claim 6 further comprising determining being enabled by a user.
- [c13] 13.A system for dynamically adjusting an operational

frequency of a digital processing device, comprising: an interface unit for receiving an external command to select a frequency operational mode;

a setting unit, coupled to the interface unit, for setting a frequency range according to the frequency operational mode; and

a processing unit, coupled to the setting unit, for selecting an operational frequency in the frequency range.

- [c14] 14. The system of claim 13, wherein the frequency operational mode is used for assigning a variation tolerance of the operational frequency.
- [c15] 15. The system of claim 13, wherein the operational frequency is capable of being adjusted by changing a core clock, a memory clock or both of them.
- [c16] 16. The system of claim 13 capable of determining being enabled by a user.
- [c17] 17. The system of claim 13, wherein the setting unit is built within the processing unit.